HHSMail Update

INFORMATION SYSTEMS COORDINATOR COMMITTEE
BI-ANNUAL MEETING

June 12, 2007

Agenda

- Status

- Cost Report Information

- Storage Quota Issue

- Decommissioning Legacy Environment

- Questions and Discussion

Status - Operations

- Service Impacting Events
  - May 5th - OWA down for 14 minutes at 5:10 pm EST. Big IP load balancers were reset to clear problem
  - May 16th – OWA down for 20 minutes at 11:10 pm EST. Big IP load balancers were reset to clear problem
  - May 17th – IXOS services down for 338 minutes at 2:35 am EST due to drive errors.
  - May 23rd – Lost communications at the NIC Card on Exchange cluster affecting email access for 23 minutes at 5:23 am EST.

Status - Operations

- There have been recent requests made by the HQ Division of Regulatory and Legal Affairs for Area IT staff to search their employee email data for messages relevant to ongoing legal litigation.
- Email data from HHSMail system can be made available to Area IT staff to perform this search by requesting mailbox export to PST file through the HQ Division of Information Security. The DIS liaison currently handling these requests is Arnold (Mike) Ginn.
- These PST files produced from the HHSMail mailbox export will be made available to Area IT staff through secured file shares.
- Since all email message data was synchronized with HHSMail for migration, it is assumed that all other historical data will be found on PST files stored on local and/or network storage already available to your IT staff.
- The Office of General Council is aware that the IHS legacy email system and associated data is no longer available or needed to perform email data searches.
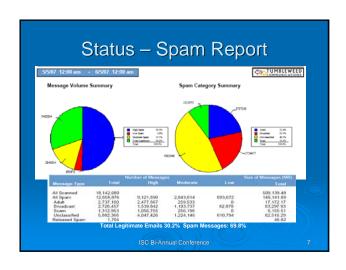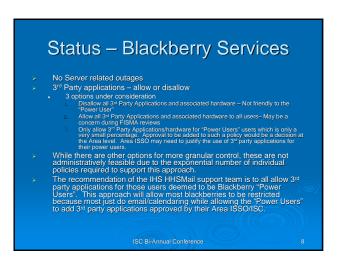
Status - Engineering

- **Mailbox Capacity Planning**
  - **Plan and estimate store/server allocation and future**
- **MS Patch Tuesday**
  - **Microsoft patches will be released, tested and installed**
- **Performance monitoring and capacity planning**
  - **Working on EM7 to provide ongoing in-depth performance data for proactive analysis of capacity**
- **ES7000/520 overhaul**
  - **The ES7000/520 housing both backend IXOS and Tumbleweed needs driver updates and Sentinel updates and work to fix some Virtual server failover issues on the backend IXOS side**
  - **Perform routine updates to the Media Server Fiber Cards and the Tape Drive Systems. Software and Firmware updates**

Status – Engineering

- **Implement the DNS Blacklist services via GFI software in the DMZ**
  - **Implement a pay service to block and drop more spam messages before they enter the email environment. Need to work with Unisys SOC to get proper firewall ports open to allow DNS lookups to DMZ servers.**
- **Blackberry Enterprise Server 4.1**
  - **Writing up proposals for updating OPDIVs to Version 4.1 BES. Documenting pros and cons of such a move.**
- **IXOS front end server balancing**
  - **Due to high stress on one of the IXOS front end servers, we are moving to balance jobs and OPDIVs between two servers.**
- **Exchange Virtual Server Registry Change to recover non-paged pool memory**
  - **Engineering followed new recommendations from Microsoft to make some registry changes on all Exchange nodes to save around 6 MB of Non-Paged Memory.**

Status – Spam Report

5/5/07 12:00 am - 6/5/07 12:00 am

Message Volume Summary

Spam Category Summary

| Message Type | Number of Messages | | | | Size of Messages (MB) |
	Total	High	Moderate	Low	Total
All Scanned	18,142,680				509,139.48
All Spam	12,658,876	9,121,590	2,843,614	693,672	149,141.89
Adult	2,737,100	2,477,567	259,533	0	17,172.17
Broadcast	2,726,457	1,539,842	1,103,737	82,878	63,297.93
Scam	1,312,953	1,056,755	256,198	0	6,155.51
Unclassified	5,882,366	4,047,426	1,224,146	610,794	62,516.29
Released Spam	1,704				46.82

Total Legitimate Emails 30.2% Spam Messages: 69.8%

Status – Blackberry Services

- No Server related outages
- 3rd Party applications – allow or disallow
  - 3 options under consideration
    1. Disallow all 3rd Party Applications and associated hardware – Not friendly to the "Power User"
    2. Allow all 3rd Party Applications and associated hardware to all users– May be a concern during FISMA reviews
    3. Only allow 3rd Party Applications/hardware for "Power Users" users which is only a very small percentage. Approval to be added to such a policy would be a decision at the Area level. Area ISSO may need to justify the use of 3rd party applications for their power users.
- While there are other options for more granular control, these are not administratively feasible due to the exponential number of individual policies required to support this approach.
- The recommendation of the IHS HHSMail support team is to all allow 3rd party applications for those users deemed to be Blackberry "Power Users". This approach will allow most blackberries to be restricted because most just do email/calendaring while allowing the "Power Users" to add 3rd party applications approved by their Area ISSO/ISC.

FY 2007 Cost Report Information

- Based on 2006 MOU, FY07 costs were to be based on snapshots taken at the end of the 1st and 2nd quarters and concatenated to generate FY07 bill.
- As a result of numerous calls with HHS regarding problems with the cost reports we initially received in April using the above approach, the following deviation was necessary to accurately represent the IHS usage and costs.
  - Problems with data extracts taken at the end of the 1st quarter required the use of extracts from February 2007 to represent 1st quarter usage to accurately represent actual usage. No migrations occurred during this time so there was no impact.
  - It was also necessary to use a data extract taken after final migrations and clean-up that occurred in March and April 2007 respectively. Therefore, the extract taken during the first week in May was used to represent the snapshot that was to be taken at the end of the 2nd quarter. All general migrations were completed by the end of the second quarter but the final clean-up removed a significant number of erroneous mailboxes and saved $$.

ABR	$348,212.60
AKA	$2,711.20
ALB	$163,165.80
BEM	$60,759.35
BIL	$118,036.45
CAL	$20,666.34
HQ	$98,080.40
NAS	$60,347.00
NAV	$334,083.10
OKC	$256,629.05
PHX	$332,876.00
POR	$81,975.75
TUC	$62,864.75
FY07 Total	$1,940,407.79

FY08 Cost Proposal by HHS

- Hot off the HHS Chief Technology Officers Desk while drafting this presentation yesterday. In order to fully recover costs for FY 2008 and beyond, the following annual costs per mailbox/resource will be presented for consideration by OPDIV CIOs at the HHS ITIRB meeting next week:

  - Extend contract through 2010:

    - Standard 200 MB Mailbox w/IXOS: $151 ($12.58 Monthly)
    - Basic 100 MB Mailbox: $100 (8.33 Monthly)
    - BlackBerry: $45 ($3.75 Monthly)
    - 100 MB Enterprise SAN: $42 ($3.50 Monthly)
    - 100 MB Commodity SAN: $24 ($2.00 Monthly)

  - Do not extend contract through 2010:

    - Standard 200 MB Mailbox w/IXOS: $169 (14.08 monthly)
    - Basic 100 MB Mailbox: $106 ($8.83 Monthly)
    - BlackBerry: $45
    - 100 MB Enterprise SAN: $42
    - 100 MB Commodity SAN: $24

- These costs reflect full cost recovery for the HHSMail contract with Unisys for FY 2008 and beyond.

ISC Bi-Annual Conference   10

Impact of Cost Proposal

- A large plus is that 50 MB "Basic" mailbox sizes will double to 100 MB at no additional cost if the HHSMail contract is extended through 2010 and only increase by $6 if it is not extended through 2010. The increase cost of a 200 MB "Standard" mailbox by $10 only slightly increases overall Area costs.
- Increases in additional storage costs will have no impact since we are deploying quota settings to eliminate all additional storage charges unless Area/Facility IT staff have explicitly requested a larger limit for a user which is very rare. Discussion about quotas in upcoming slides.
- Since IHS has a relatively low number of Blackberry devices, this cost increase will only slightly increase overall Area costs.
- This proposal provides a significant increase in value at very little increase in cost to IHS.

ISC Bi-Annual Conference   11

FYI - Market Survey Conducted at the request of HHSMail User Council

➤Survey performed to provide independent verification and validation of costs of HHSMail when comparing with similar "enterprise" class services.
➤The table was actually done by IHS based on data collection performed by NIH IT staff who does not participate in the HHSMail solution which can be considered an independent party.

Service\Vendor	Appriver	ASP-One	123 Together	Intermedia	Average	HHSMail
200 MB Mailbox	1$12.95	1$12.50	1$9.95	1$11.50	$11.73	$11.75
500 MB Mailbox	1$12.95	1$12.50	$9.95	$11.50	$11.73	$16.44
1 GB Mailbox	$12.95	$12.50	2$13.21	$11.50	$12.54	$24.25
Archiving	$9.95	$10.00	Cost can not available	Cost can not available	$9.98	$9.00
BlackBerry	$9.95	$10.00	$9.99	$9.95	$9.97	$1.33
SPAM	$9.00	$1.20	$11.50	$1.08	$1.00	$9.00
200 MB w/SPAM and Archival					$22.70	$11.75
500 MB w/SPAM and Archival					$22.70	$16.44
1 GB w/SPAM and Archival					$23.51	$24.25

➤Intended to provide macro level view
➤Many assumptions were required to correlate services
➤Service alignment is approximate

ISC Bi-Annual Conference   12

Storage Quota Issue
200 MB Mailboxes w/IXOS

- Our expectation was that IXOS would automatically manage and keep them below the limit to avoid having to deploy quota limits and charges for additional storage.
- The reality is that IXOS employs rules that archive attachments based on their size and are deployed to have acceptable IXOS performance.
- This size limit was set to archive attachments 50K or larger but we were able to negotiate this down to 25K or larger. The manufacturer, Open Text, will not support setting this any lower for performance reasons.
- Although this helped there are still 1,985 mailboxes that are near or over 200 MB because these users don't manage their email. This causes the limit to be reached because thousands of email messages, many with attachments less than 25 KB, can still exceed 200 MB.
- Although the billing report showed the additional costs for storage because of users being over 200 MB, we were not charged. Next year, given the increase in additional storage costs noted in previous slide, we definitely want to get quotas correctly implemented prior to FY 2008 to automatically manage mailbox sizes/costs.

Storage Quota Issue
200 MB Mailboxes w/IXOS – Goal & Next Steps

- Apply quota warning and send/receive limits appropriately to avoid being charged additional storage fees
  - Warning: 180MB or 90%   (184320)
  - Prohibit Send: 190MB or 95%   (194560)
  - Prohibit Send/Receive: 200MB or 100%   (204800)

- Implement these quota limits for users currently under these limits.
- Send notification email to remaining 200MB mailbox users with instruction on how and why their mailbox needs to be managed below these limits by a certain date.
- HQ Rockville team will draft the message template for user notifications and if desired by the ISCs will send on to all affected users.

Storage Quota Issue
50 MB Basic Mailboxes

- The current quota limits on these mailboxes are set to warn at 50 MB, prohibit send at 75 MB, and prohibit receive at 100 MB.
- This was done to accommodate the migration process because many mailboxes were over 50 MB at the time of migration and remain over the limit. These quota limits were never throttled back.
- While we are ready to do this with appropriate user notifications, this may not be required if previously discussed increase in the basic mailbox size is approved by the HHS ITIRB next week.
- Let's place the quota issue for 50 MB mailboxes on the back burner waiting on final notice from the HHS CTO regarding next weeks HHS ITIRB decision.
- The quota settings for the basic mailbox definitely needs to be addressed appropriately before FY 2008 to avoid any additional storage costs.

Decommissioning Legacy Environment

- ➢ All Exchange Servers have been decommissioned with the exception of one in Rockville and one in Albuquerque.
- ➢ These boxes are used to support the Recipient Update Service(RUS) which provides the ability to mail-enable user accounts.
- ➢ Timeframe for discontinuing support for legacy email addresses has been extended until application programming staff are available to address process by which IHS systems such as ITAS and GovTrip, can be updated with every user's primary SMTP address following the format First.Last@IHS.gov.
- ➢ It is likely this will have to wait until needed programming staff are available after the UFMS scheduled deployment is complete in October 2007.

Questions and Discussion